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**initiating Factors** 

- Smoke Inhalation
- · Lack of Exercise, Diet, Stress
- · Clinical and Subclinical Infections
- Hypertension
- Trauma

**Cardiovascular Cell Activation** Free Radical Production Pseudopod Formation Adhesion Molecules Degranulation · Reduced Perfusion, Ischemia, Thrombosis · Leukocyte Infiltration, Immune Reaction · Ox-LDL, oxidative stress

- · MI, Stroke, CV ischemia
- · Adult respiratory distress syndrome · Accelerated atherosclerosis, stenosis
- · Arthritis, organ transplant rejection
- · Alzheimer's
- · Diabetes, hypertension
- Venous insufficiency

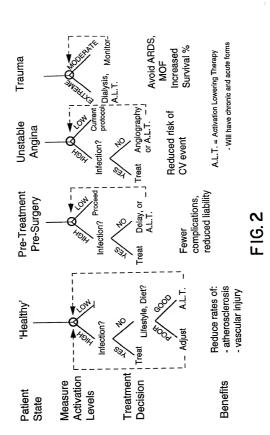
acute

chronic

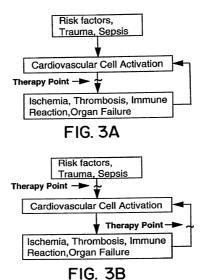
FIG. I

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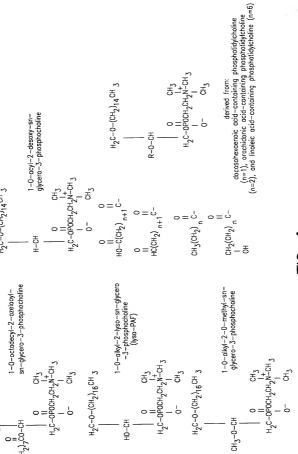


FIG. 4

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Letter Key for peptide origin: b = bovine h = hamster m = man o = otherp chymotrypsinogen A(14-15) SR p chymotrypsinogen B(14-15) AR b neochymo A autoactivation(147-9) TNA b neochymo B autoactivation(147-9) NAL b neochymo B autoactivation(148-9) ALo anionic trypsinogen activation peptide TPTDDDDDK cationic trypsinogen activation peptide FPLDDDDDK b cationic trypsinogen activation peptide h trypsinogen residue (human) **FPVDDDDK** APFDDDDDKI APFDDDDDK h trypsinogen 2 peptide h trypsinogen 3 peptide DDDDDK CGVPAIQPVLSGLSR b chymotrypsinogen A sigtransduction chymotrypsinogen A sigtransduction CGVPAIPPVLSGLSR chymotrypsinogen B sigtransduction CGVPAIQPVLSGL CGVPAIPPVLSGLSR p chymotrypsinogen B sigtransduction p chymotrypsinogen C sigtransduction CGVPSIPPNLS CGVPAIKPALBFB p chymotrypsinogen D sigtransduction r chymotrypsinogen B sigtransduction MAFLWLVSCFALVGATFG r proelastase 1 sigtransduction MLRFLVFASLVLYGHS p proelastase 2 sigtransduction MIRALLLSTLVAGALS r proelastase 2 CGYPTYEVQHDVSR r proelastase 1 TODFPETNAR r proelastase 1 DFPETNAR p proelastase 2 CGLPANLPQLPR m proelastase 2A **CGDPTYPPYVTR** m proelastase 2B **CGVSTYAPDMSR** p trypsinogen FPVDDDDDK b trypsinogen VDDDDDK m prophospholipase A2 DSGISPR p prophospholipase A2 EEGISSR b prophospholipase A2 EAGLNSR o prophospholipase A2 (horse1) GISPR **ENGISPR** o prophospholipase A2 (horse2) m thyrotropin-releasing EHP m gonadtropin-releasing EHWSYGLRPG m growth-hormone-releasing VHLSAEEKEA m somatostatin AGCKNFFWKTFTSC CYIQNCPRG m vasotocin m oxytocin CYIONCPLG HSQGTFTSDYSKYLDSRRAQDFVQWLMNT m glucagon RPPGFSPFR m bradykinin HSDGTFTSELSRLRDSARLQRLLQGLV m secretin m cholecystokinin-pancreozymin (C-terml) ISDRDYMGWMDF SDNNQQGKSAQQGGY m scotophobin m gluthatione ECG

LRDRDDIA APVD

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SYSMEHFRWGKPVGKKRRPVKVYPNGAEDELAEAFPLEF p adrenocotricotropin SYSMEHFRWGKPVGKKRRPVKVYPNGAEDESAUAFPLEF m adrenocotricotropin SYSMEHFRWGKPVGKKRRPVKVYPNGEAEDSAQAFPLEF b adrenocotricotropin SYSMEHFRWGKPV m MSH p CRP-I (C-reactive protein) DIGYS SWESA p CRP-II (C-reactive protein) p CRP-III not reactive (C-reactive protein) KPOLWP p CRP-IV not reactive (C-reactive protein) LFEVPEVT p CRP-V not reactive (C-reactive protein) VGGSEI p CRP-VI (C-reactive protein) WDFV NMWDFV p CRP-VII (C-reactive protein) LVAGD m leukotaxin (no sequence order) m leukocyte promotion factor RKPVLYATNGSODC SYSM m ACTH fragment BMLF fMLP (chemotactic factor) b chymotrypsinogen A (247-8) TN o peptidetide cleaved by chymo C SHLVE AKKK o peptidetide cleaved at brushborder o peptidetide cleaved at brsuhborder AAAA KKKK o peptidetide cleaved at brushborder o peptidetide cleaved at brushborder AKKKK o peptidetide cleaved at brushborder KKKKK o peptidetide cleaved at brushborder LWMRFA o peptidetide cleaved at brushborder KKKKKK VAAKIVG o peptidetide cleaved at brushborder VCGE o insulin B fragment o insulin B fragment LCGS LVCG o insulin B fragment o neutrophil chemotactic peptide ELR o neutrophil chemotactic peptide ELRC o part of NAP-2 SSSGEHFEGEKVFHVNVEDENDIO p pro-carboxypeptidase B p carboxypeptidase A activation KEDFVGHOVLRISVDDEAQVQKVKEL peptide MAGRGGSRVLALCAALAAGGWLLAA r carboxypeptidase E signal peptide KEDFVGHQVLRITAADEAEVQ p pro-carboxypeptidase A p cleavage procarboxypeptide B TTGHSYEK SVLEAOFDSR p cleaved F4 procarboxpeptidase B p cleaved procarboxypeptidase B HHDGEHFEGEKVFR h proelastase YVTR VVGG h proelastase 2 YVTR h proelastase activation sequence AAPPRGR o profactor D fragment o profactor D fragment APPRGR STFWAYQPDGDNDPTDYQKYEHTSSPSQLLAPGDYPCVIE r CCK-releasing factor o integrin endothelial (RGD) GRGDSP o integrin endothelial (RGE) GRGESP APGPR r enterostatin (gut) r enterostatin (pancreas) vpgpr FMRF o mulluscan cardioexcitatory

r C-terminal glucagon pancreatic peptide

r glucagonoma precursor

WHWLQL

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r Thyrotropin Re Hormone EHPG **GGGPPS** h composition of aa gliadin h composition of aa gliadin GGGPPY KRNRNNIA o proglucagon o preprogastrin, preproCCK HRROL GLY o pancreatic peptide cleavage produce
YPALPEAPGEDASPDDLSRYYASLRHYLDLVTRQRY o PYY (pancreatic peptide GLY YY) o adrenocorticotropin hormone fragment H SYŚM o adrenocorticotropin hormone fragment H YMEHFRW p Angiotensin II fragment DRVYIHP o Angiotensin II fragment horse VYIHPF p Angiotensin III fragment RVYIHPI p Angiotensinogen fragment VIHN o bradykinin fragments 1-5 RPPGF o bradykinin fragments 1-6 RPPGFS o bradykinin fragments 1-7 RPPGFSP o bradykinin fragments 2-7 PPGFSP o chemotactic factor for eosinophils AGSE o chemotactic factor for eosinophils VGSE o fMLP w/ Phe group BMLFF o fMLP class **BMMM** o fMLP class VGDE YGGFLK o leucine enkephalin lys o ser-leu enkephalin-thr YSGFLT o met enkephalin arg phe YGGFMRF o D-met, pro enkephalinamide YMGFP o supports fibroblast attachment RGDS o supports fibroblast attachment o CCK fragment 30-33 GRGDTP WMDF o leutenizing hormone fragment LRPG o alpha-melanocyte stimulatory hormone HTATFK o delta-melanocyte stimulatory hormone SMEVRGW YPFVEPIH o beta-casomorphin o beta-casomorphin fragment 1-3 YPF o D-ala,tyr- fragment 1-5 amide YAFAY o D-arg,lys fragment 1-4 amide YRFK h hypercalcemia of malignancy factor TRSAW o substance P fragment 1-4 RPKP o substance P fragment 5-11 OOFFGLM o substance P fragment 7-11 FFGLM o thymopoietin II fragment 32-6 RKDVY o U5 peptide h C3a 72-77 fragment DKWEL HKGKAR o hydra peptide fragment 7-11 CVIKE o leukopyrokinin fragment 4-8 FTPRL KOAGDV o RGD related peptide o lys-thymosin alpha1 fragment KEEAE o responsible for nicks at purine in DNA KYK r prothrombin precursor 5-9 FLEEI

o alpha1 mating factor fragment